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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,793	10/21/2003	David J. Monnie	KLR/KAR:8474.0004	5608
152 7590 08/24/2007 CHERNOFF, VILHAUER, MCCLUNG & STENZEL 1600 ODS TOWER 601 SW SECOND AVENUE PORTLAND, OR 97204-3157			EXAMINER WILSER, MICHAEL P	
			ART UNIT 2195	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/690,793

Applicant(s)

MONNIE ET AL.

Examiner

Michael Wilser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-45 are pending in this application.

Drawings

2. The drawings are objected to because Figure 1 reference character 20 is labeled "JAVA APZ CLASS FILES". Where as the specification says that item 20 is "JAVA API CLASS FILES". This appears to be a typographical error and will be handled as such.

Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the

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description: 44 in Figure 4A, 110 in Figure 5, 206 in Figure 8, 330 in Figure 10B, 416 in Figure 11, and 418 in Figure 11.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "302" has been used to designate both a server and an application. Reference character "304" has been designated as both a connected computer and a virtual machine. Reference character "306" has been designated as both a connected computer and an application. Reference character "308" has been designated as both a connected computer and a virtual machine.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: the examiner notes the use of acronyms (e.g. DOS, HTML, XML, etc.) throughout the specification without first including a description in plain text, as required.

4. The use of the trademarks Macintosh, Windows, Linux, Windows 9x, Windows NT, Java, Java Virtual Machine, Sun Microsystems, Apple, and Microsoft have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

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5. Claims 4, 6-7, 19, 21-22, 34, and 36-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following claim language is unclear and indefinite:

(i) As per Claims 4, 19, and 34 line 1, it recites "plural" listeners. It is unclear where this "plural" said listener is located (i.e. Claim 1, line 7) only recites "a" listener. It is uncertain what the relationship is among "a listener" in Claim 1 and "plural" said listeners in Claims 4, 19, and 34.

(ii) As per Claims 6, 21, and 36 line 1, it recites a "native method". The applicant fails to particularly point out which item the method is native to, whether it is the shared space or the applications native methods.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 5-10, 12-13, 16, 18, 20-25, 27-28, 31, 33, 35-40, and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veselov (US 7,131,120) in view of Moore et al. (US 7,171,663).

8. As per Claim 1, Veselov teaches the invention substantially as claimed including a system for concurrent operation of plural applications comprising:

a. a shared object (resource) space capable of storing at least one shared object (resource) accessible to at least two applications so that at least one application is capable of causing an event in the object (column 3, lines 46-47); and

b. at least one of the applications is running on a virtual machine (column 4, lines 33-41).

9. However, Veselov does not explicitly disclose that a listener is associated with at least one of the applications running in a virtual machine that is listening for the event. However, Moore discloses a system in which a virtual machine has a listener registered to listen for an event (column 4, lines 53-58).

10. It would have been obvious to one having ordinary skill in the art at the time of invention to have had a listener in the virtual machine in Veselov. One would have been motivated to have a listener in the virtual machine to listen for an event since a listener is a common component of the virtual machine environment so that the virtual machine

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knows when a resource has become available in the underlying system that the machine is running on.

11: As per Claim 16, it was rejected for the same reason as Claim 1 above.

In addition, Moore discloses a system in which a virtual machine has a listener registered to listen for an event (column 4, lines 53-58) and being able to identify which application caused the event (column 5, lines 18-22).

12. It would have been obvious to one having ordinary skill in the art at the time of invention to have had a listener in the virtual machine in Veselov. One would have been motivated to have a listener in the virtual machine to listen for an event and identify the source application since a listener is a common component of the virtual machine environment so that the virtual machine knows when a resource has become available in the underlying system that the machine is running on and to be able to track the appropriate that caused the occurrence of the event.

13. As per Claim 31, it was rejected for the same reason as Claims 1 and 16 above.

In addition, Veselov discloses the object (resource) containing an identifier of the application that caused the event (column 8, lines 8-13).

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14. As per Claim 3, Veselov and Moore disclose a system as in Claim 1 above, and Veselov further discloses that at least two applications are capable of causing the event (column 4, lines 33-41).

15. As per Claim 5, Veselov and Moore disclose a system as in Claim 1 above and Veselov further discloses that at least one of the virtual machines is a Java virtual machine (column 4, lines 39-41).

16. As per Claim 6, Veselov and Moore disclose a system as in Claim 1 above, and Veselov further discloses that the shared object (resource) space is linked to each application by a native method interface (column 5, lines 5-10).

17. As per Claim 7, Veselov and Moore disclose a system as in Claim 6 above, and Veselov further discloses that the system contains a default directory with a native library (column 5, lines 22-39).

18. As per Claim 8, Veselov and Moore disclose a system as in Claim 1 above, and Veselov further discloses that the system comprises a non-object oriented application (column 11, lines 3-5).

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19. As per Claim 9, Veselov and Moore disclose a system as in Claim 8 above, and Veselov further discloses that the non-object oriented application is a C application (column 11, line 6).

20. As per Claim 10, Veselov and Moore disclose a system as in Claim 1 above, and Veselov further discloses that access to the object (resource) by the applications is synchronized (column 7, lines 3-7).

21. As per Claim 12, Veselov and Moore disclose a system as in Claim 1 above, and Veselov further discloses that at least one object (resource) is a copy shared among the applications (column 7, lines 53-58).

22. As per Claim 13, Veselov and Moore disclose a system as in Claim 1 above, and Veselov further discloses that at least one object (resource) is direct shared among the applications (column 6, lines 52-55).

23. As per Claims 18 and 33, they were rejected based on the same rejection as Claim 3 above.

24. As per Claims 20-25 and 35-40, they were rejected based on the same rejection as Claims 5-10 above.

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25. As per Claims 27-28 and 42-43, they were rejected based on the same rejection as Claims 12-13 above

26. Claims 2, 4, 11, 14-15, 17, 19, 26, 29-30, 32, 34, 41, and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veselov (US 7,131,120) and Moore et al. (US 7,171,663) as applied to claims 1, 16, and 31 above, and further in view of Barinov et al. (US 2004/0025171).

27. As per Claim 2, Veselov and Moore disclose a system as in Claim 1 above, but do not explicitly disclose that the listener is located in the shared object (resource) space. However, Barinov discloses a system in which the listener is located in a shared space (page 3, paragraph 31).

28. It would have been obvious to one having ordinary skill in the art at the time of invention to have the listener in Veselov by in the shared space. One would have been motivated to have the listener be in the shared space so that the listener could detect an event from either application instead of each application having to check the shared space with its own listener for an event and therefore the space could keep track of who has the resource and what modifications are being made.

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29. As per Claim 4, Veselov and Moore disclose a system as in Claim 1 above, but do not explicitly disclose the system including plural listeners. However, Barinov disclose a system that does comprise plural listeners (page 5, paragraph 66).

30. It would have been obvious to one having ordinary skill in the art at the time of invention to have had plural listeners in Veselov. One would have been motivated to have multiple listeners so that the applications or the shared object (resource) could listen for more than just one event to take place or could listen for several different sub events associated either with the resource or with the application.

31. As per Claim 11, Veselov and Moore disclose a system as in Claim 1 above, but do not explicitly disclose that the application implement a stock trading system. However, Barinov discloses a system with applications that do implement a stock trading system (page 21, paragraph 100).

32. It would have been obvious to one having ordinary skill in the art at the time of invention to have the application in Veselov implement a stock trading system. One would have been motivated to implement a stock trading system since any system having multiple users entering a shared resource could be implemented using an application and a listener since many people would be looking for different events to determine whether they should buy or sell stocks, this is just one example of such use.

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33. As per Claim 14, Veselov and Moore disclose a system as in Claim 1 above, but do not explicitly disclose of a system manager that analyzes information pertaining to the operation of the shared object (resource) space. However, Barinov discloses a system in which a manager does analyze the shared resource space (page 3, paragraph 29).

34. It would have been obvious to one having ordinary skill in the art at the time of invention to have a system analyzer in Veselov. One would have been motivated to have a system analyzer for the shared resource space so that the operation of the shared resource can be monitored and any errors in operation can be reported to avoid system failures.

35. As per Claim 15, Veselov and Moore disclose a system as in Claim 1 above, but do not explicitly disclose of including a name space in the shared object (resource) space. However, Barinov discloses a similar system in which a name space is included in the shared space (page 5, paragraph 61).

36. It would have been obvious to one having ordinary skill in the art at the time of invention to have a name space in the shared space in Veselov. One would have been motivated to have a name space to be able to easily associated the application trying to access the shared resource as well as knowing which application needs to be notified when the shared resource becomes available.

37. As per Claims 17 and 32, they were rejected based on the same rejection as Claim 2 above.

38. As per Claims 19 and 34, they were rejected based on the same rejection as Claim 4 above.

39. As per Claims 26 and 41, they were rejected based on the same rejection as Claim 11 above.

40. As per Claims 29-30 and 44-45, they were rejected based on the same rejections as Claims 14-15 above.

Conclusion

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- a. Berry et al. (US 6,738,977) Class Sharing Between Multiple Virtual Machines.
- b. Cabezas et al. (US 2004/0199828) Method and Apparatus for Tracing Troubleshooting Events for Aiding Technical Assistance.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Wilser whose telephone number is (571) 270-1689. The examiner can normally be reached on Mon-Fri 7:30-5:00 EST (Alt Fridays Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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